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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,319	04/25/2002	Manfred Stefener	GRUNP117	1648

49691 7590 12/02/2005

IP STRATEGIES
12 1/2 WALL STREET
SUITE I
ASHEVILLE, NC 28801

EXAMINER

CREPEAU, JONATHAN

ART UNIT	PAPER NUMBER
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1746

DATE MAILED: 12/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/018,319

Applicant(s)

STEFENER ET AL.

Examiner

Jonathan S. Crepeau

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-29, 74 and 75 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-29, 74 and 75 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This Office action addresses claims 23-29, 74, and 75. The claims remain rejected for the reasons of record. Accordingly, this action is made final.

Claim Rejections - 35 USC § 103

2. Claims 23-29, 74, and 75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lessing et al (U.S. Patent 5,641,585).

The reference teaches a miniature ceramic fuel cell that is supported on a consumer device such as a mobile telephone (see Fig. 1). As shown in Figures 1 and 2, both the fuel and ambient air are pumped to the fuel cell using pumps (22, 26). The fuel is contained in a tank (18) that is mounted on the consumer (see Fig. 1). Regarding claim 25, the fuel cell is operable on hydrogen (see col. 4, line 63). Regarding claims 24, 28, 74, and 75, the pumps are capable of being controlled in the claimed manner.

The reference does not expressly teach that the fuel tank is a module that “can be inserted into the consumer” as recited in claim 23.

However, the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made because the artisan would be motivated to use such a removable fuel tank in the system of Lessing. It is apparent that the fuel tank of Lessing contains a fixed volume fuel. As such, when the fuel supply is depleted, it would be expedient to be able

to simply replace the fuel tank. Therefore, the artisan would have motivation to use a removable fuel tank. Further, it has been held that making integrally connected elements separable from each other is generally not sufficient to distinguish a claim over the prior art. See *In re Dulberg*, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961); MPEP 2144.04.

Response to Arguments

3. Applicant's arguments filed September 28, 2005 have been fully considered but they are not persuasive. Applicant asserts that the disclosure of the housing encasing the phone components at column 4, line 37 of Lessing would teach away from the claimed feature that the fuel tank is exchangeable. However, it is submitted that this disclosure does not "teach away" from the claimed invention. The fact that the fuel tank, among other components, is encased by the housing does not preclude it being a removable or exchangeable tank. For example, a conventional cellular phone battery may be located within the phone housing but is removable. As such, the above passage is not seen to teach away from the claimed invention.

Applicant further states that the examiner has not provided the teaching necessary to take the inventive step of using an exchangeable fuel tank in the system of Lessing. However, it is submitted that this modification of Lessing would be obvious based on the knowledge available in the art. The following references are cited which represent the state of the art: Kelly et al (6,268,077), already of record, discloses a portable device having fuel cell with a removable fuel tank in column 3, line 42; Gamo et al (5,976,725) discloses a removable tank (200) and associated valve structure in a fuel cell system for use in a portable device; and Jankowski et al

(6,638,654) teaches a MEMS-based fuel cell system comprising a modular fuel cartridge which can be “easily replaced or recharged” (col. 3, line 13). It is believed that these disclosures represent the state of the art in portable fuel cell systems, and the artisan therefore would be reasonably apprised of the relevant disclosures of these references; i.e., their use of removable fuel tanks. Therefore, Applicant’s assertion that the claimed use of a replaceable fuel tank represents an inventive step is not persuasive.

Conclusion

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Crepeau whose telephone number is (571) 272-1299. The examiner can normally be reached Monday-Friday from 9:30 AM - 6:00 PM EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr, can be reached at (571) 272-1414. The phone number for the organization where this application or proceeding is assigned is (571) 272-1700. Documents may be faxed to the central fax server at (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jonathan Crepeau
Primary Examiner
Art Unit 1746
November 29, 2005